

What is claimed is:

1. A method for the enhanced production of bacterial toxins comprising cultivating a toxin producing bacteria wherein toxin expression inhibitors formed by said toxin producing bacteria are eliminated or reduced.
2. The method according to claim 1 wherein said toxin-producing bacteria is selected from the genus consisting of *Bordetella*, *Clostridium*, *Staphylococcus*, *Salmonella*, *Shigella*, *Vibrio* and *Escherichia*.
3. The method according to claim 2 wherein said toxin producing bacteria is *Bordetella pertussis* or *Bordetella bronchiseptica*.
4. The method according to claim 1 or 3 wherein said toxin is pertussis toxin (PT) or pertactin.
5. The method according to claim 1 wherein said toxin expression inhibitor is sulfate ion.
6. The method according to claim 5 wherein said sulfate ion is eliminated or reduced from within a bacterial cell or culture media using a method selected from the group consisting of;
 - a) adding a composition to said bacterial culture media that forms a substantially insoluble complex with said sulfate ion;
 - b) providing said bacterial culture medium that is deficient, or has a reduced concentration of sulfate ion metabolic precursors; and
 - c) providing a cysteine desulfurinase knockout mutant bacteria.

7. The method according to claim 6, wherein said composition is a soluble metal salt.
8. The method according to claim 7, wherein said soluble metal salt is BaCl₂ or BaBr₂.
9. The method according to claim 8, wherein said soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).
10. The method according to claim 6 wherein said sulfate ion metabolic precursor is cysteine.
11. The method according to claim 6 where in said bacterial culture medium that is deficient, or has a reduced concentration of sulfate ion metabolic precursors further comprises a soluble metal salt that forms a substantially insoluble complex with said sulfate ion
12. The method according to claim 6 wherein in said cysteine desulfinate knockout mutant bacteria is a recombinant *Bordetella pertussis* or *Bordetella bronchiseptica*.
13. A method of cultivating *B. pertussis*, comprising cultivating *B. pertussis* in the presence of an effective amount of one or more soluble metal salts that form a substantially insoluble complex with sulfate.
14. The method of claim 13, wherein the soluble metal salt is a Ba(II) halide.
15. The method of claim 13, wherein the soluble metal salt is BaCl₂ or BaBr₂.

16. The method of claim 13, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).
17. A method of making a culture medium that supports *B. pertussis* growth and prevents or decreases inhibition of PT expression by sulfate, comprising admixing a *B. pertussis* culture medium with an effective amount of one or more soluble metal salts that form a substantially insoluble complex with sulfate.
18. The method of claim 17, wherein the soluble metal salt is a Ba(II) halide.
19. The method of claim 17, wherein the soluble metal salt is BaCl₂ or BaBr₂.
20. The method of claim 17, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).
21. A culture medium that supports the growth of *B. pertussis* comprising an amount of one or more soluble metal salts that form a substantially insoluble complex with sulfate, wherein said amount prevents or reduces the inhibition of PT expression by sulfate.
22. The culture medium of claim 21 , wherein the soluble metal salt is a Ba(II) halide.
23. The culture medium of claim 21, wherein the soluble metal salt is BaCl₂ or BaBr₂.
24. The culture medium of claim 21, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).

25. A method of producing PT comprising growing *B. pertussis* in a *B. pertussis* culture medium comprising an effective amount of a soluble metal salt that forms a substantially insoluble complex with sulfate, and isolating the PT from the culture medium.
26. The method of claim 25 , wherein the soluble metal salt is a Ba(II) halide.
27. The method of claim 25, wherein the soluble metal salt is BaCl₂ or BaBr₂.
28. The method of claim 25, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).